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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,148	10/28/2003	Daniel Edward Bowen III	DN2001-163D03	6457
7590 12/16/2005			EXAMINER	
The Goodyear Tire & Rubber Company Patent & Trademark Department - D/823 1144 East Market Street Akron, OH 44316-0001			CHOI, LING SIU	
			ART UNIT	PAPER NUMBER
			1713	
DATE MAILED: 12/16/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/695,148

Applicant(s)

BOWEN ET AL.

Examiner

Ling-Siu Choi

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-12, 14 and 16-20 is/are rejected.
- 7) ☒ Claim(s) 7, 13 and 15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>08/24/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. This Application is a Division of US Application No. 10/222,739, filed August 16, 2002. Claims 1-20 are now pending, wherein claim 1 is an independent one.

Claim Objections

2. Claims 7, 13, and 15 are objected to because of the following informalities: (a) **claim 7** is a redundancy of claim 6; (b) **claim 7** is a redundancy of claim 8; (c) **claim 13**, lines 1-2, "wherein the monomer" is suggested to be changed to --the modified silane moiety--; (d) **claim 13**, lines 4-5, "wherein X" groups can be the same or different; wherein X" represents a chemical moiety" is suggested to be deleted; and (e) **claim 15**, lines 1-3, "at least one member selected from the group consisting of R, R' and R" is a hydrogen atom" is suggested to be changed to --at least one of R, R' and R" is a hydrogen atom--.

Appropriate correction is required.

Allowable Subject Matter

3. Claims 1-20 are allowable over the closest references: Ender (US 3,287,291) and Nakamura et al. (US 5,973,067).

A polymer comprising polymer chains having
at least one modified silane moiety bonded thereto,
wherein the modified silane moiety is of a structural formula selected from the group consisting
of formulae 1-10 shown in claim 1

(summary of claim 1)

Ender discloses an organosilicon compound represented by the formula of $\text{Si}[(\text{OCH}_2)_n\text{OCH}_3]_4$ which includes $\text{Si}(\text{OCH}_2\text{OCH}_3)_4$, $\text{Si}[(\text{OCH}_2)_5\text{OC}_4\text{H}_9]_4$, $\text{Si}(\text{OCH}_2\text{OC}_2\text{H}_5)(\text{OCH}_2\text{OCH}_3)(\text{OCH}_2\text{OCH}_2\text{OC}_2\text{H}_5)(\text{OCH}_2\text{OCH}_2\text{OCH}_3)$, $\text{Si}(\text{OCH}_2\text{OCH}_3)[(\text{OCH}_2)_3\text{OCH}_3][(\text{OCH}_2)_2\text{OCH}_3][(\text{OCH}_2)_4\text{OCH}_3]$ (col. 1, lines 15-20; col. 2, lines 14-26). However, Ender does not teach or fairly suggest a polymer comprising the claimed modified silane moiety.

Nakamura et al. disclose an alkenyltrialkoxysilane which can be allyltrimethoxysilane, allyltriethoxysilane, allyltri(ethoxymethoxy)silane, butenyltrimethoxysilane, hexenyltrimethoxysilane, or hexaenyltriethoxysilane (claims 1 and 3). However, Nakamura et al. do not teach or fairly suggest a polymer comprising the claimed modified silane moiety.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reach on 571-272-1114.

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L. S. Choi

**LING-SUI CHOI
PRIMARY EXAMINER**

November 30, 2005